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I hereby certify that this transmittal of the below described is being deposited with the United States Postal Service in an envelop bearing First Class Postage and addressed to the Commissioner for patent, PO Box 1450, Alexandria, VA 22313-1450 on the below date of deposit.

| | | |
|--|--|------------|
| Date of Deposit: <u>1-4-05</u> 20 December 2004 | Name of Person Making the Deposit: Ramona J. Zaya | Signature: |
|--|--|------------|

| | | |
|---|--|--|
| Inventor (s) Serial No: Filed: Title: Data Communications Methods, Compressed Media Data Decoding Methods, Compressed Media Data Decoders, Articles Of Manufacture, And Data Communications Systems | DEBARGHA MUKHERJEE 10/698,885 31 October 2003 | Group Art Unit: <u>2613</u> Examiner: <u>N/A</u> HP Docket No.: 100201426-1 |
|---|--|--|

PETITION TO SECURE FILING DATE AS OF MAILING DATE VIA EXPRESS MAIL

PETITION

1. Applicant petitions that this application be accorded the filing date on which the papers were sent "Express Mail Post Office to Addressee" mailing label No.: EL979977687US on **31 October 2003**

SUBMISSIONS

2. Submission herewith is:

☒ A copy of each page of the application showing the executed Express Mail certificate and mailing label number.

☐ A copy of the corresponding U.S. Post Office receipt establishing the deposit of the Express Mail on : **31 October 2003**

☒ A copy of the returned postcard from the USPTO stamped with the Serial Number and filing date.

☐ A copy of the cancelled checks referring to the new application identified above.

☐ A copy of the attorneys Deposit Account Statement, in which the items (s) corresponding to the deposit of the application referred to above is checked.

☐ A copy attorney's mailing log showing the dispatch of the above identified application as Express Mail label No. _____ on _____.

☒ A copy of the filing receipt received from the USPTO showing the incorrect Filing Date.

☒ A copy of the Application Transmittal showing the Certificate of Mailing executed on **31 October 2003**.

PETITION FEE

3. The Petition fee (37 C.F.R.1.17(h)-\$130.00) is paid as follows:

☐ A check paid in the sum of \$130.00

☒ Authorization is hereby made to charge the amount of \$130.00

☒ to Deposit Account No. 08-2025

☐ to Credit card as shown on the attached credit card information authorization form PTO-2038.

☐ Charge any additional fees required by this paper or credit my overpayment in the manner authorized above.

A duplicate copy of this authorization is attached.

REQUEST FOR REFUND OF PETITION FEE

4. ☒ Because no defect exists in applicants' previous submission, a refund of the petition fee is respectfully requested, to be paid by

☐ a refund check

☒ a credit to the charge authorization account

Please direct all correspondence concerning the above-identified application to the following address:

Hewlett-Packard Company
Intellectual Property Administration
PO Box 272400
Fort Collins, Colorado 80527-2400

Date: 1/4/05 ~~20 December 2004~~

Express Mailing label: EV207636256US

by:
Susan E. Heminger
Reg. No.: 36,449

01/12/2005 BABRAHAI 00000105 082025 10698885

01 FC:1251 120.00 DA

01/21/2005 BABRAHAI 00000028 082025 10698885

01 FC:1464 130.00 DA

Adjustment date: 01/21/2005 BABRAHAI
01/12/2005 BABRAHAI 00000105 082025 10698885
01 FC:1251 120.00 CR



PDNO. 100201426-1
Hewlett Packard Company

10-31-2003

The stamp of the U.S. Patent and Trademark Office acknowledges receipt of the application for letters patent of the following:

Applicant:
Titled:

Debargha Mukherjee
Data Communications Methods, Compressed Media Data Decoding
Methods, Compressed Media Data Decoders, Articles of Manufacture, and
Data Communications Systems

1. Return Postcard Receipts (2)
2. PTO Utility Application Transmittal Form (PTO/SB005)
3. 34 pages of Specification, Claims and Abstract
4. Inventor's Declaration
5. 7 sheets of formal drawings (Figs. 1-14)
6. Information Disclosure Statement with Form PTO-1449
7. Cited References (10)

EL979977687



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application Serial No. Filed Herewith
Filing Date Filed Herewith
Inventorship Debargha Mukherjee
Assignee Hewlett - Packard Company
Group Art Unit Unknown
Examiner Unknown
Attorney's Docket No. 100201426-1(HE53-044)
Title: Data Communications Methods, Compressed Media Data Decoding Methods, Compressed Media
Data Decoders, Articles of Manufacture, and Data Communications Systems

EX POST DECLARATION OF EXPRESS MAILING

I hereby declare that I have deposited the below-listed papers with the United States Postal Service "Express Mail Post Office to Addressee" service, addressed and posted as indicated below, in compliance with 37 CFR 1.10. The Express Mail label No. has been placed on one or more of the papers listed.

Express Mail Number: EL973977687
Date of Deposit: 4:38 10/31/03
Time of Deposit: 4:38 AM/PM
Deposited By: ☒ Delivery to Postal Employee

Addressee: MAIL STOP PATENT APPLICATION
COMMISSIONER FOR PATENTS
P.O. BOX 1450
ALEXANDRIA VA 22313-1450

Place of Deposit:

- | | |
|--|--|
| <input type="checkbox"/> U.S. Post Office (Paulsen Bldg. Br.) 421 West Riverside, Room 201 Spokane, Washington 99201 Last Scheduled Drop Box Pickup: 4:40 pm | <input type="checkbox"/> U.S. Post Office (DIST. CTR.) 2928 S. Spotted Road Spokane, Washington 99202 Last Scheduled Drop Box Pickup: 9:00 pm |
| <input checked="" type="checkbox"/> U.S. Post Office (Riverside Station) 904 West Riverside Spokane, Washington 99201 Last Scheduled Drop Box Pickup: 5:00 pm | <input type="checkbox"/> U.S. Post Office _____ Branch _____ Last Scheduled Drop Box Pickup: __ am/pm |

Listing Of Items Enclosed In Mailing:

1. Return Postcard Receipts (2)
2. PTO Utility Application Transmittal Form (PTO/SB/05)
3. 34 pages of Specification, Claims and Abstract
4. Inventor's Declaration
5. 7 sheets of formal drawings (Figs. 1-14)
6. Information Disclosure Statement with Form PTO-1449
7. Cited References (10)

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statement may jeopardize the validity of the application or any patent issued therefrom.

Dated this 31 day of October, 2003 Dated at Spokane, Washington

Trinity Coxon
Trinity Coxon



HEWLETT-PACKARD COMPANY
Intellectual Property Administration
P.O. Box 272400
Fort Collins, Colorado 80527-2400

PATENT APPLICATION

ATTORNEY DOCKET NO. 100201426-1

IN THE U.S. PATENT AND TRADEMARK OFFICE
Patent Application Transmittal Letter

Mail Stop Patent Application
Commissioner for Patents
PO Box 1450
Alexandria, VA 22313-1450

EL979977687

Sir:

Transmitted herewith for filing under 37 CFR 1.53(b) is a(n): (X) Utility () Design

(X) original patent application,

() continuation-in-part application

INVENTOR(S): Debargha Mukherjee

TITLE: Data Communications Methods, Compressed Media Data Decoding Methods, Compressed Media Data Decoders, Articles of Manufacture, and Data Communications Systems

Enclosed are:

- (X) The Declaration and Power of Attorney. () signed (X) unsigned or partially signed
(X) 7 sheets of drawings (one set) () Associate Power of Attorney
() Form PTO-1449 (X) Information Disclosure Statement and Form PTO-1449
() Priority document(s) (X) (Other) Return Receipt Postcards (2) (fee \$)
Cited References (10)

| CLAIMS AS FILED BY OTHER THAN A SMALL ENTITY | | | | |
|---|---------------------|---------------------|-------------|---------------|
| (1) FOR | (2) NUMBER FILED | (3) NUMBER EXTRA | (4) RATE | (5) TOTALS |
| TOTAL CLAIMS | 37 — 20 | 17 | X \$18 | \$ 306 |
| INDEPENDENT CLAIMS | 5 — 3 | 2 | X \$86 | \$ 172 |
| ANY MULTIPLE DEPENDENT CLAIMS | 0 | | \$290 | \$ 0 |
| BASIC FEE: Design (\$340.00); Utility (\$770.00) | | | | \$ 770 |
| TOTAL FILING FEE | | | | \$ 1,248 |
| OTHER FEES | | | | \$ |
| TOTAL CHARGES TO DEPOSIT ACCOUNT | | | | \$ 1,248 |

Charge \$ 1,248 to Deposit Account 08-2025. At any time during the pendency of this application, please charge any fees required or credit any over payment to Deposit Account 08-2025 pursuant to 37 CFR 1.25. Additionally please charge any fees to Deposit Account 08-2025 under 37 CFR 1.16 through 1.21 inclusive, and any other sections in Title 37 of the Code of Federal Regulations that may regulate fees. A duplicate copy of this sheet is enclosed.

"Express Mail" label no. EL 979977687 US

Date of Deposit 10/31/03

I hereby certify that this is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 on the date indicated above and is addressed to: Commissioner for Patents, Alexandria, VA 22313-1450.

By Trinity Coxon
Typed Name: Trinity Coxon

Respectfully submitted,

Debargha Mukherjee

By James D. Shaurette

James D. Shaurette

Attorney/Agent for Applicant(s)

Reg. No. 39,833

Date: 10/31/03

Telephone No.: (509) 624-4276



DATA COMMUNICATIONS METHODS, COMPRESSED MEDIA DATA DECODING
METHODS, COMPRESSED MEDIA DATA DECODERS, ARTICLES OF
MANUFACTURE, AND DATA COMMUNICATIONS SYSTEMS

FIELD OF THE INVENTION

[0001] Aspects of the invention relate to data communications methods, compressed media data decoding methods, compressed media data decoders, articles of manufacture, and data communications systems.

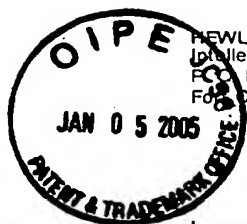
EL979977687

BACKGROUND OF THE INVENTION

[0002] Interactive media sessions are increasing in popularity. As the processing power of computers continues to increase, and communications bandwidth of communications devices is improved, the popularity of interactive media communications is also expected to increase. However, to date, the substantial focus has been on media delivery with relatively little advancements for interactive media experiences.

[0003] Some arrangements of video coding use a plurality of images of a sequence. In some implementations, the images of the sequence are decoded linearly in time. However, for interactive viewing, a user may randomly request specific images out of linear order as the user navigates an image. Exemplary interactive media communications sessions may involve 3D graphics or other rich interactive media having very large files (even after compression) to be communicated and processed. The amount of data increases exponentially with richness and raises formidable issues in distribution and experience of the media over the Internet.

[0004] In many situations, it may not be possible to communicate the associated files to clients in entirety before experience commences. In fact, even very high bandwidth connections by modern standards may not be able to accommodate these interactive media files. This problem is compounded by the presence of clients connecting to a source of the interactive media files having diverse capabilities. For example, at least some of the clients may be coupled with relatively slow communications connections, use computers of relatively slow processing capabilities, or use computers with limited display capabilities.



HEWLETT-PACKARD COMPANY
Intellectual Property Administration
PO Box 272400
Ft. Collins, Colorado 80527-2400

PATENT APPLICATION

ATTORNEY DOCKET NO. 100201426-1

IN THE
UNITED STATES PATENT AND TRADEMARK OFFICE

Inventor(s): Debargha Mukherjee

Confirmation No.:

Application No.:

Examiner:

Filing Date:

Group Art Unit:

Title: Data Communications Methods, Compressed Media Data Decoding Methods,
Compressed Media Data Decoders, Articles of Manufacture, and Data Communications
Systems

Commissioner for Patents
PO Box 1450
Alexandria, VA 22313-1450

EL979977687

INFORMATION DISCLOSURE STATEMENT

Sir:

This Information Disclosure Statement is submitted:

- ☒ under 37 CFR 1.97(b), or
(Within three months of filing national application; or date of entry of national application; or before
mailing date of first office action on the merits; whichever occurs last)
- ☐ under 37 CFR 1.97(c) together with either a:
☐ Statement under 37 CFR 1.97(e), or
☐ a \$180.00 fee under 37 CFR 1.17(p), or
(After the 37 CFR 1.97 (b) time period, but before final action or notice of allowance, whichever occurs first)
- ☐ under 37 CFR 1.97 (d) together with a:
☐ Statement under 37 CFR 1.97(e)(1) or (2), and
☐ a \$180.00 fee set forth in 37 CFR 1.17(p).
(Filed after final action, a notice of allowance, on or before payment of the issue fee)

Please charge to Deposit Account **08-2025** the sum of \$0.00. At any time during the
pendency of this application, please charge any fees required or credit any overpayment to Deposit
Account **08-2025** pursuant to 37 CFR 1.25.

☒ Applicant(s) submit herewith Form PTO 1449 - Information Disclosure Statement together with
any required copies of patents, publications or other information of which applicant(s) are aware, which
applicant(s) believe(s) may be material to the examination of this application and for which there may be
a duty to disclose in accordance with 37 CFR 1.56.

☐ A concise explanation of the relevance of foreign language patents, foreign language publications
and other foreign language information listed on PTO Form 1449, as presently understood by the
individual(s) designated in 37 CFR 1.56 (c) most knowledgeable about the content is given on the
attached sheet, or where a foreign language patent is cited in a search report or other action by a
foreign patent office in a counterpart foreign application, an English language version of the search
report or action which indicates the degree of relevance found by the foreign office is listed on form PTO
1449 and is enclosed herewith.

It is requested that the information disclosed herein be made of record in this application.

"Express Mail" label no. **EL 979977687 US**

Date of Deposit

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United States Postal Service "Express Mail Post
Office to Addressee" service under 37 CFR 1.10 on
the date indicated above and is addressed to:
Commissioner for Patents, Alexandria, VA
22313-1450.

By

Typed Name: Trinity Coxoo

Respectfully submitted,

Debargha Mukherjee

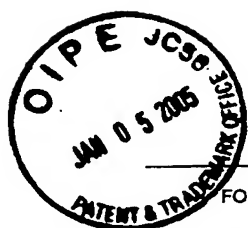
By

James D. Shaurette

Attorney/Agent for Applicant(s)

Reg. No. **39,833**

Date: 10/31/03



PATENT APPLICATION

Sheet 2 of 2

FORM PTO-1449

LIST OF PATENTS AND PUBLICATIONS FOR
APPLICANT'S INFORMATION DISCLOSURE
STATEMENT

(Use several sheets if necessary)

ATTY. DOCKET NO.

100201426-1

APPLICATION NO.

CONFIRMATION NO.

APPLICANT

Debargha Mukherjee

FILING DATE

GROUP

REFERENCE DESIGNATION

U.S. PATENT DOCUMENTS

| EXAMINER INITIAL | | DOCUMENT NUMBER | PUBLICATION DATE | NAME | Pages, Columns, Lines Where Relevant Passages or Figures Appear |
|---------------------|----|--------------------|---------------------|-------------|--|
| | 2A | | | | |
| | 2B | | | | |
| | 2C | | | | |
| | 2D | | | | |
| | 2E | | | | |
| | 2F | | | EL970977687 | |
| | 2G | | | | |
| | 2H | | | | |
| | 2I | | | | |
| | 2J | | | | |
| | 2K | | | | |

FOREIGN PATENT DOCUMENTS

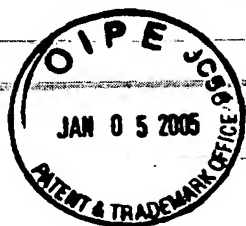
| | | DOCUMENT NUMBER | PUBLICATION DATE | NAME OF PATENTEE OR APPLICANT | Pages/Columns/Lines Where Relevant Passages/Figures Appear | Check if Translation attached |
|--|----|--------------------|---------------------|----------------------------------|---|-------------------------------------|
| | 2L | | | | | |
| | 2M | | | | | |
| | 2N | | | | | |
| | 2O | | | | | |
| | 2P | | | | | |

OTHER REFERENCES (including Author, Title, Date, Pertinent Pages, etc.)

| | | |
|--|----|---|
| | 2Q | "System, Method and Format Thereof For Scalable Encoded Media Delivery"; Mukherjee et al.; U.S. patent application Serial No. 10/196,506; Filed 7/15/2002; client docket no. 100202339-1. |
| | 2R | |
| | 2S | |

EXAMINER

DATE CONSIDERED



PDNO: 100201426-1
Hewlett Packard Company

M

10-31-2003

The stamp of the U.S. Patent and Trademark Office acknowledges receipt of the application for letters patent of the following:

Applicant: Debargha Mukherjee
Titled: Data Communications Methods, Compressed Media Data Decoding Methods, Compressed Media Data Decoders, Articles of Manufacture, and Data Communications Systems

1. Return Postcard Receipts (2)
2. PTO Utility Application Transmittal Form (PTO/SB/05)
3. 34 pages of Specification, Claims and Abstract
4. Inventor's Declaration
5. 7 sheets of formal drawings (Figs. 1-14)
6. Information Disclosure Statement with Form PTO-1449
7. Cited References (10)

17548 U.S. PTO
10/698885



10/31/03

EL979977687



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
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P.O. Box 1450
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| APPL NO. | FILING OR 371 (c) DATE | ART UNIT | FIL FEE REC'D | ATTY. DOCKET NO | DRAWINGS | TOT CLMS | IND CLMS |
|------------|---------------------------|----------|---------------|-----------------|----------|----------|----------|
| 10/698,885 | 10/30/2003 | 2613 | 1248 | 100201426-1 | 7 | 37 | 5 |

HEWLETT-PACKARD COMPANY
Intellectual Property Administration
P.O. Box 272400
Fort Collins, CO 80527-2400

RECEIVED

FEB 05 2004

HP LEGAL
IPA

CONFIRMATION NO. 2006

FILING RECEIPT



OC000000011803937

Date Mailed: 02/02/2004

Receipt is acknowledged of this regular Patent Application. It will be considered in its order and you will be notified as to the results of the examination. Be sure to provide the U.S. APPLICATION NUMBER, FILING DATE, NAME OF APPLICANT, and TITLE OF INVENTION when inquiring about this application. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. If an error is noted on this Filing Receipt, please write to the Office of Initial Patent Examination's Filing Receipt Corrections, facsimile number 703-746-9195. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts" for this application, please submit any corrections to this Filing Receipt with your reply to the Notice. When the USPTO processes the reply to the Notice, the USPTO will generate another Filing Receipt incorporating the requested corrections (if appropriate).

Applicant(s)

Debargha Mukherjee, San Jose, CA;

Domestic Priority data as claimed by applicant

Foreign Applications

If Required, Foreign Filing License Granted: 01/30/2004

Projected Publication Date: To Be Determined - pending completion of Missing Parts

Non-Publication Request: No

Early Publication Request: No

Title

Data communications methods, compressed media data decoding methods, compressed media data decoders, articles of manufacture, and data communications systems

Preliminary Class

348

**LICENSE FOR FOREIGN FILING UNDER
Title 35, United States Code, Section 184
Title 37, Code of Federal Regulations, 5.11 & 5.15**

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